

(FILE 'HOME' ENTERED AT 21:35:21 ON 25 JUL 2006)

FILE 'CAPLUS, MEDLINE' ENTERED AT 21:35:37 ON 25 JUL 2006

L1	19637 S ?GLYOXAL
L2	5462 S BIGUANIDE
L3	434 S L2 AND (PHENFORMIN OR BUFORMIN)
L4	2 S L3 AND L1
L5	1 DUPLICATE REMOVE L4 (1 DUPLICATE REMOVED)
L6	15 S L1 AND L2
L7	13 DUPLICATE REMOVE L6 (2 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 21:39:04 ON 25 JUL 2006

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1
TI Effect of buformin and metformin on formation of advanced
glycation end products by methylglyoxal
AB Background. The formation and accumulation of advanced glycation end
products (AGE) in various tissues are known to be involved in the aging
process and complications of long-term diabetes. Aminoguanidine as AGE
inhibitors was first studied, and metformin as biguanide compds.
have been reported to react with reactive dicarbonyl precursors such as
methylglyoxal. Methods. We studied the effects of the biguanides
of buformin and metformin on AGE formation by the methods of
specific fluorescence, and ELISA and a Western blot anal. using the
anti-AGE antibody after incubating BSA or RNase with methylglyoxal
. Results. Buformin is a more potent inhibitor of AGE formation
than metformin, and suggests that the amino group of buformin
trap the carbonyl group of methylglyoxal to suppress formation
of AGE. Conclusion. In addition to that of metformin, buformin may
be clin. useful to prevent diabetic complications.

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